



THE INFLUENCE OF WASTE USE ON THE INCOME OF RESIDENTS OF RW.03 HARAPAN BARU - BEKASI

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Abstract

The purpose of this activity is to reuse waste and reduce the accumulation of household waste so that floods do not occur and to use waste with the creations and innovations of the surrounding community. Apart from that, it is also to increase people's income by collecting and exchanging waste every week with garbage collectors or trading it with other used goods that are suitable for use at RW-03 Harapan Baru, Bekasi Utara. The type of research in this thesis is a qualitative descriptive research and taking primary data sources using purposive sampling technique. Data collection techniques are carried out in three ways, namely observation, interviews, and documentation. The data analysis technique used consisted of data reduction, data presentation and drawing conclusions. The results show that waste management provides many benefits to the surrounding community, the environment becomes comfortable, beautiful, green, and adds to the community's economic income. This activity received support from several parties such as the local government, the PKK driving team, and Care for the Environment, so that the skills of residents to process waste increase in quality and quantity.

The conclusion from this study is that household waste can bring benefits from a social, economic and environmental perspective for the welfare of residents in RW.03 Harapan Baru Bekasi.

Keywords: Garbage, Economic Value, Community Participation

INTRODUCTION

Data from the Ministry of Environment and Forestry (MEF) states that the average amount of waste production produces 175,000 tons per day or equivalent to 64 million tons per year. This makes Indonesia called the second waste producing country after China. Of the amount of waste mentioned above, only 7% is recycled and the rest accumulates in Final Disposal Sites/TPA. There is a lot of waste that is not recycled, especially plastic waste.

According to World Health Organization (WHO) waste is something that is not used, not used, not liked or something that is thrown away that comes from human activities and does not happen by itself. Meanwhile, according to Law Number 18 of 2008 concerning Management, waste is the residue of human daily activities and/or from natural processes in solid form. So, it can be concluded that waste is material or objects that are no longer used or unwanted residue or waste is objects that are no longer used by living things and become waste objects from daily community activities, industrial activities and household activities.

Garbage is a difficult problem to deal with. This is caused by the habit of the people who always produce waste from every product used. At present, most of it is plastic waste, because plastic that is cheap, strong and easy to find makes people unable to escape the use of plastic waste.

In fact, plastic waste is made of inorganic materials that are difficult to decompose or even cannot be completely decomposed. If plastic waste is buried in the ground, it takes about 80-100 years to decompose. However, piles of plastic waste in the ground can cause textural damage to the surface structure of the soil and also create an unpleasant odor which is detrimental to people's health and activities. , these diseases originate from contamination of waste by the feces of disease-carrying living things consisting of bacteria, viruses, protozoa, and worms. Even worse, waste causes various disasters, for example: methane gas explosions, landslides, air pollution due to open burning.

Pollution caused by waste can be minimized, Kusminah (2018) in her journal provides advice regarding waste problems, namely by implementing the 4R principle (Reduce, Reuse, Replace and Recycle). items that are disposable., Reuse is using repeatedly items made of plastic, Replace means

replacing items that are only for one use and replace them with items that can be used repeatedly and are safe and Recycle is recycling items. - Items made of plastic.

The 4R method is strengthened by Yunikati, et al (2019) the 4R program so that people are aware that the community is aware of sorting the 4R concept waste (reduce, reuse, reuse, replace) to reduce the impact, so we can take advantage of this plastic waste by reusing it and processing it into goods, which is useful. The creation of recycling plastic waste is a craft that can be an alternative business opportunity. Plastic waste can be made into handicrafts such as brooches, shopping bags, wallets, decorative lamps, pencil cases, baskets, and so on. So, not only saving the environment, as a creative product, the creation of plastic waste has high economic value. Community development in the utilization of waste waste is important because there is also waste that interferes with waste that can be utilized. So that waste can be managed by the community so that it can increase economic income, create a clean and healthy environment. The reality on the ground is that waste management has not been optimally utilized, it can be seen that there are still many people who do not know how to utilize waste by recycling it, using it as organic fertilizer and utilizing the processed waste to make it into a family medicinal plant garden from waste waste such as plastic bottles, glass bottles , organic fertilizers and others.



Figure 1.Example Selection of plastic waste



Figure 2. An example of the creation of recycled coffee packaging plastic waste

Manager of RW-03 New Hope more emphasis on the process of community awareness to play an active role protecting the environment by sorting waste from their homes. As a bonus, they get added economic value from waste that has been sorted and can be sold through recycling.

According to Law Number 18 of 2008 waste management is defined as a systematic, comprehensive and sustainable activity which includes waste reduction and handling. Waste processing is an activity that is intended to reduce the amount of waste, besides utilizing the value that is still contained in the waste itself (recycled materials, other products, and energy). The community's role is very active in reducing the amount of waste in RW-03, such as recycling waste by involving the community to be directly involved in the utilization of waste waste. The form of community participation is joining as a permanent member of saving waste or becoming a customer of a waste bank.

Solutions to overcome the waste problem can be done by increasing coaching community towards all

waste management programs that started at the unit scale (kelurahan level), then continued on a wider scale.

The first category consists of used goods including motor batteries, aluminum pots, various types of cans, and iron. This group has a price from the highest, namely IDR 11,000 to IDR 2,700 per Kg/pcs. While the second group consists of used oil bottles, Aqua glass, various types of plastic bottles (Aqua, shampoo, and others), cardboard and sacks. This group has a price from the highest, namely IDR 2,500 to IDR 1,500 per Kg/pcs. Furthermore, the last category is the third group, namely used paper, magazines, egg plates, plastic buckets and carpets. This group has a price range from IDR 1,200 per Kg/pcs to IDR 500 per Kg/pcs. (Data List Price RW-03 New Hope)

The purpose of this study was to find out community development in the utilization of waste waste that had been carried out by residents of RW-03 Harapan Baru. The use of waste carried out by residents empowers the community to increase economic income as well as providing creative training to the community in managing and utilizing proper and useful waste. By making waste as a friend, not as an enemy.

According to Government Regulation No. 39In 2006 monitoring was the activity of observing the progress of the implementation of an activity plan, identifying and anticipating problems that arise and or will arise so that action can be taken as early as possible. Monitoring is a continuous assessment of the function of program activities in terms of the schedule for the use of data input/input by the target group in relation to the expectations that have been planned. Monitoring is an activity to find out whether the program made is running as it should according to plan, whether there are obstacles that occur and how the implementers of the program overcome these obstacles.

According to Soetomo (2013) citing Tila'ar(1997: 231) that an empowered society is a society that lives in a civil society, namely a society that believes in the ability of its members to create a better life and a society that is aware of their rights and obligations in social life. where empowerment conditions will be realized if community members get the opportunity to be more empowered.

There are several ways to reduce wastewhich are moreeither from burning, namely as explained in the Walhi website. There are four principles that can be used in dealing with this waste problem. The four principles are better known as the 4R which includes:

1. Reduce (Reduce); as much as possible to minimize goods or materials we use.
The more we use materials, the more waste is generated.
2. Reuse (Reuse); as much as possible choose items that can be reused.
Avoid using disposable items (one time use, throw away). Matterthis can extend the time an item is used before it becomes trash.
3. Recycle (Recycle); as much as possible, items that are no longer useful, can be recycled repeat. Not all items canrecycled, but now there are many non-formal industries and domestic industrywho take advantagetrash into something else.
4. Replace (Replacing); Examine the things we use every day. Replace only items can be used once with goodswhich is more durable. Also be careful that we only use items that are more environmentally friendly, for example, replace our plastic bags with baskets when shopping, and don't use styrofoam because these two materials cannot be degraded naturally.

With this research activity in RW-03 Harapan Baru Residents, asefforts to maximize the value of waste with the aim of increasing income and creating a healthy, clean, green and beautiful environment, as well as reducing waste to landfill, changing people's behavior, educating people who care about the environment, increasing creativity, and providing benefits from waste.

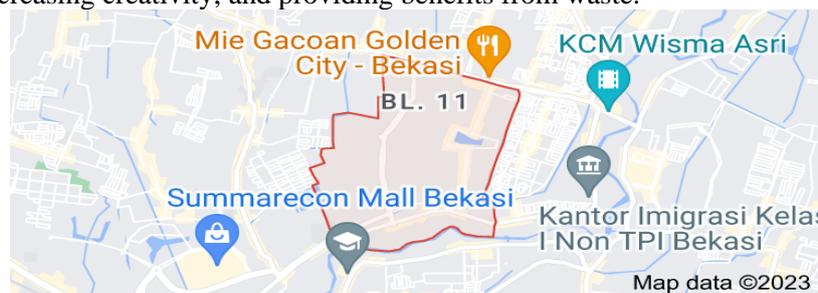


Figure 3 Location RW-03 New Hope, North Bekasi

LITERATURE REVIEW

Income

According to Sukirno (2006:76) a person's demand for an item is determined by many factors. Among these factors, the most important are as follows:

1. Price itself.
2. Prices of other goods closely related to these goods.
3. Income House ladder Andpeople's average income.
4. The pattern of income distribution in society.
5. Community image.
6. Total population.
7. Forecasts about conditions in the future.

In general, income is the amount of income received by a community for a certain period of time as remuneration valued in rupiah. The total family income is the total amount income from the family either comes from the main job or is valued in Rupiah within a certain period of time.

Public

According to Koentjoroningrat(2000: 144-146) society is a unit of human beings who interact with each other according to a certain system of customs that are continuous and bound to each other by a sense of the same identity within themselves.

METHOD

Research Approach

This research is a study to reveal the meaning behind all research subjects, namely the people of RW-03 Harapan Baru, who are waste managers in Harapan Baru Village, North Bekasi District. The approach taken in disclosing facts is a qualitative research with a narrative approach.

Types of research

This research uses descriptive qualitative, which is a method that is carried out with the aim of raising facts, circumstances, variables, and phenomena that occur when the research is taking place and presenting it as it is.

The scope of research

The location of this research was carried out in RW-03 Harapan Baru, Harapan Baru Village, North Bekasi District. In this study using a non-probability sampling technique, namely the Purposive Sampling method as a sampling technique. The purposive sampling method was used for reasons of study objectives and homogeneity issues, especially for respondents from the community.

Data Types and Sources

Data which used in this research is primary data.

1. Data collection technique

To find out the amount of data needed in this study, the researcher used the Library Research technique, in which the researcher read related and supporting literature, both directly and indirectly, and Field Work Research, in which the researcher went directly to the object being studied. will be examined in order to obtain the necessary data, which among others is carried out by means of: Observation, Interview, Documentation.

2. Data analysis technique

Data analysis in qualitative research is carried out when data collection takes place, and after completing data collection within a certain period. Miles and Huberman (1984), argued that activities in qualitative data analysis are carried out interactively and continuously until complete, so that the data is saturated, meaning that data obtained from various sources are collected sequentially and systematically to make it easier for researchers to compile their research results. Activities in data analysis, namely data redemption, data display, and conclusion drawing/verification. The data validation technique in this study uses source triangulation. Source triangulation means comparing and re-checking the degree of trust in information obtained through different times and tools in qualitative methods

RESULTS AND DISCUSSION

Implementation of Waste Utilization Research can affect the increase in income in RW-03

Harapan Baru. And until now, we continue to carry out mentoring activities to increase proficiency in making products.

There has been a change in society, which initially only disposed of plastic waste which resulted from a lack of insight and knowledge and no desire to utilize this waste after the training was carried out, the people around the area where they live, of course they will protect their environment and minimize environmental pollution produced by waste by not throwing it away. However, the waste is reused into recycled plastic creation products that have a high economic selling price. Plastic waste recycling creation training provides a change in attitude, especially mothers who have attended the training have an entrepreneurial spirit and are aware of the dangers of waste in the environment they live in, one example so that people can increase their economic income amid the Covid-19 pandemic and have activities while they are at home in a pandemic like this.

The community's skills increase before and after the plastic waste recycling creation training, before the women attend the training, they usually only throw away or sell the plastic waste to the bollards but, after attending the training the women have new skills, namely by making recycled plastic waste creations and use the plastic waste.



Source: BPS City of Bekasi (2022)

TPA is a placeCollecting has the same function as certain areas in general. This environmental agency was born from a group of youths with six members, all six of whom are aware of the garbage

that has accumulated in the surrounding environment which has become a big problem so far. By looking at the (organic) kitchen waste that has accumulated in their homes, it turns out to have a good impact on plants.

The purpose of building this TPA is to manage waste wisely and benefit the community, especially in RW-03 residents. Garbage is also useful both agriculturally as fertilizer for organic waste and economically inorganic waste can be made into handicrafts and also has aesthetic value. The community's response to the construction of a waste bank is positive, but there are also cons because they do not understand what and how a waste bank is. However, as time went on, people understood what the function of this waste bank was and they decided to become customers.

According to the director of the DP waste bank (33 years) as follows: "the purpose of the guidance that we have provided to the community and customers is to raise awareness of people who care about the environment by providing training on waste processing such as sorting waste, recycling both organic and inorganic waste. Another goal is to motivate the RW Management to always move and motivate the community, one of which is by giving rewards to customers who are active in saving waste and following the coaching that we have done." To carry out the objectives that have been determined, the waste bank carries out a coaching strategy by moving together in inviting the community to care for the environment by utilizing waste that exists in the community to make it useful and have economic value. Then the manager recruits customers. The customer recruitment strategy is carried out by conveying information to the public through outreach.

According to IL (57 years) in an interview he said that: "...to provide guidance on the utilization of waste RW-03 has breadth in acting, so it can work with PKK women, Karang Taruna, study groups and also through the heads of RT and RW. The way to do coaching through activities that exist in the group. Coaching methods about recycling, about compost, and coaching about family medicinal plants which is carried out to the community using lecture methods, demonstrations, and direct practice assisted by supervisors. According to IL (57 years) in an interview as follows:

"...holding waste sorting socialization with the community after weighing the waste savings. Furthermore invite customers to make compost by first collecting household waste. The coaching method used is the demonstration method and hands-on practice.." (IL, 14 February 2022) The same thing was also expressed by MS (52 years) as the Head of Researcher as follows:

"...Waste management can increase income for residents and minimize waste disposal. So that research is done on the utilization of waste waste that can be used as recycling. In addition, the Research Team also conducted counseling on the use of the biopori system in the community to place it in the yards of residents' houses. The coaching method used is the lecture method and hands-on practice. The waste bank unit only continues what the main trash bank has done for customers and the community around the garbage bank unit..." (MS, 18 February 2022)

According to the Head of RT-002 IK (52 years) the coaching and research materials provided to the people of RW-03 Harapan Baru, Bekasi City in particular in the form of skills training materials. The following are the results of the interviews conducted:

"... for our research, we conducted activities on how to sort waste from an early age to early childhood school children through educational material on sorting waste. To improve the skills of our customers, we also hold activities such as recycling training, hydroponic training, training on making biopore compost, crafts, and there are also educational visits..." (SR, 32 January 2022) Implementation of research of course there is monitoring and evaluation in order to achieve the goal effectively defined. Monitoring (supervision) and evaluation activities carried out through RW administrators.

According to the Chairman of RW-03 SR (32 years) as following:

"...monitoring (supervision) that we do is by observing directly to the coaching site and asking directly with customers and trainers who take part in coaching activities. Such as supervising the management of waste recycling in the Pasar Dua Mandiri waste bank unit..." (SR, February 2022)

) According to SR (32 years) as Head of RW-03 Harapan Baru, Bekasi as follows:

"...the supervision and evaluation that we do is by looking at the research and coaching that is being carried out and going straight into tutoring and mingling with customers. And another effort is to see the results of the coaching. This effort is to find out the extent to which the coaching carried out is in accordance with the previously expected goals..." (SR 32 February 2022)

A construction has a goaluseful for achieving expectations. There is a process in the implementation of coaching and also the results of the coaching that has been done.

As conveyed by HS (53 years) as the Research Team and also as a coaching tutor in the interview as follows:

“...this coaching can improve andincrease the knowledge of customers so that they are good at sorting waste properly, such as sorting organic and inorganic waste so that this activity can encourage them to be economical. That this waste can be utilized if the waste is separated...” (HS, 8 February 2022)

In a training that is carried out, there is a change in the attitude of the participants who follow it. Just like community development that has been done.

According to IK (52 years) as Chairman of RT.002 as well as a builder, namely:

"...in cultivating medicinal plants for the family, the expected result from us is to grow people's assumptions, especially housewives, about the benefits of toga for everyday life...". (IK, 8 February 2022)

According to EP (47 years) as a resident of sebafollowing styles:

“The research as well as the coaching that I participate in is very useful for me and other residents in handicraft skills. I have participated in various waste recycling coaching activities. From making flowers from asoy plastic, paper, plastic cups to the latest from used paint cans.” (EP, February 8, 2022)

From the results of the interviews conducted, it was found that coaching was very beneficial for the people who participated in improving their skills. The community shows their skills by pouring creative ideas into handicrafts from waste waste. Skills public Whichobtained is the hard work of the coach in encouraging and helping the community in participating in coaching activities. So that the result of skills by the community is notonly as a collection for them, can also be traded in the market of course with quality quality.

This research was conducted among the general public, mostly attended by housewives. The research activity was carried out in the RW-003 Harapan Baru Hall, near the garbage weighing. This research was conducted to find out the knowledge, skills and mental attitude of the community through a waste recycling training program, compost fertilizer and a family medicinal plant development program (toga) which was carried out for customers.

The results of this research really help the community so that they can sort waste that can be reused, sold, and recycled. And also make customers become independent, improve skills and knowledge. In addition, the results of the coaching carried out are the growth of public awareness not to dispose of waste carelessly, fostering an attitude of caring for the environment from waste and teaching children not to dispose of waste carelessly by disposing of waste in the space provided.

The results regarding the coaching that has been carried out is that the community can make use of waste (garbage) to be useful through non-formal education programs, namely community empowerment so that people can increase their knowledge, skills and mental attitudes. Besides that, another hope is that the community will grow a sense of concern for not littering, the community will also participate in admonishing/forbidding other people from littering and fostering people's love for the environment starting from their respective homes by utilizing the yard of the house to become a family medicinal plant garden.

CONCLUSION

Based on the results of the research and discussion, it can be concluded that some conclusions in this study are as follows:

1. Residents have household waste, then residents will make an election by separating waste by type, after that it is sorted according to type and then the sorted waste will be taken to the TPA or made creative, then weighed and sold to garbage collectors, as for plastic waste and other used goods that have been collected at the TPA originating from residents will be stored in the TPA while, after the used goods and plastic waste are collected, the last step of the TPA will be selling it back to collectors This is done because the TPA or the residents have not had time to recycle the existing used goods.
2. The role of the RT-RW Management in terms of improving the economy of its citizens can be said still low, this is based on the results of interviews with respondents directly that the income received by the RW-03 community, especially those who become residents IDR 20,000 to IDR 100,000 per month.

3. The motivating factors for the RW-03 Harapan Baru community to join as Waste Awareness

Residents because of the motive (Because Of Motive), that is, people want to take advantage of it existing used goods, especially household waste, and creating a clean environment especially from plastic waste. While other driving factors namely. Purpose motive (in Order To Motive), people want to increase income outside of the main job is to increase income to meet needs.

REFERENCES

- Afifuddin & Saebani, BA (2012). *Qualitative Research Methodology*. Bandung: CV. Faithful Library.
- Arikunto, S. and Jabar. (2008). *Evaluation of Educational Programs: Practical Theoretical Guidelines for Education Students and Practitioners*. Jakarta: Earth Script.
- Alex, S. (2012). *Success in Processing Organic Waste Into Organic Fertilizer*. Yogyakarta: New Press Library.
- Basriyanta. 2007. *Harvesting Garbage*. Yogyakarta: Kanisius
- Darmi, Hamid. (2014). *Social Education Research Methods*. Bandung: Alfabet.
- Estin, Nofiyanti., Nurcholis, Salman.,, Novi Nurjanah., Melly, Mellyanawaty., Tazkia., Nurfadhillah. (2019) *Plastic Waste Recycling Training to Become Environmentally Friendly Souvenirs in Tasikmalaya Regency Vol. 1, No. 2*
- Fitria, Siti N. (2014). *Employee Performance Development In Carrying Out Main Duties and Functions at the Klaten District Education Office, Development of Employee Performance in Carrying Out Main Duties and Functions at the Klaten District Education Office (Thesis)*. Yogyakarta: FIP UNY.
- Herdiansyah, Haris. (2012). *Qualitative Research Methods: for the social sciences*. Jakarta: Salemba Humaika.
- Irwan, Zoer'aini Djamil. (2008). *Environmental Challenges and Urban Forest Landscapes*. Jakarta: PT Bumi Aksara.
- Kusminah, Imah Luluk. (2018). *Counseling on 4r (Reduce, Reuse, Recycle, Replace) and the Use of Garbage Banks as Steps to Create a Clean and Economical Environment in Mojowuku Village, Gresik Regency*. *Journal of Community Service LPPM Untag Surabaya*. 3(1). 22-28. Retrieved from <http://jurnal.untag-sby.ac.id/index.php/jpm17/article/view/1165>
- Kuncoro, S. (2010). *Integrated Waste Management*. Bandung: Alfabet.
- Mukhtar. 2013. *Practical Methods of Qualitative Descriptive Research*. Jakarta:
- Mardikanto, Totok & Soebianto, Poerwoko. (2015). *Community Empowerment in Public Policy Perspective*. Bandung: Alfabet.
- McLeish, Ewan. (2009). *Eco-Friendly Home*. Translated by Nurulia, Lily. Solo: PT Tiga Serangkai Pustaka Mandiri.
- Moleong, Lexy J. (2007). *Qualitative Research Methodology*. Bandung: PT Juvenile Rosda Karya.
- Your Highness, Ricky M. (2005). *Environmental Health*. Jakarta: Graha Ilmu.
- Nangoi, Ronald. (2004). *Empowerment of the Knowledge Economy Era*. Jakarta: PT Grasindo.
- Novi, Marline. (2014). *Utilization of Household Waste (Inorganic Waste) as a Form of Environmental Education Implementation*. *Formative Journal*. 4(2): 124-132.
- Regulation of the Minister of Environment of the Republic of Indonesia Number 13 of 2012 Waste Bank
- Satori, D. & Komarudin, A. (2009). *Qualitative Research Methodology*. Bandung: Alfabet.
- Soetomo. (2013). *Community Development Strategies*. Yogyakarta: Student Libraries.
- Sugiyono. (2014). *Quantitative Research Methods, Qualitative and R & D*. Bandung: Alfabet.
- Suharto, Eddie. (2005). *Community Building Empowering Communities: Strategic Study of Social Welfare Development & Social Work*. Bandung: PT Refika Aditama.
- Thoha, M. (2004). *Organizational Coaching: process diagnosis and intervention*. Jakarta: Raja Grafindo Persada.
- Law Number 18 of 2008 Waste Management
- Law Number 23 of 1997 Environmental Management.
- Yunikati, et al. (2019). *Be aware of sorting waste with the 4R concept (Reduce, Reuse, Recycle, Replace) DDesa gedongarum, Kanor, Bojonegoro*. *Journal Innovation Results of Community Service*. 2(2). 81-87. Retrieved from <http://research.unisma.ac.id/index.php/jipemas/article/view/1122>